

STATEMENT OF BASIS (AI No.. 83344)

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0072389 to discharge to waters of the State of Louisiana.

THE APPLICANT IS: Halliburton Energy Services, Inc.
Hanger Drive
Post Office Box 42810
Houston, Texas 77242

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

PREPARED BY: Michelle Bickham

DATE PREPARED: August 28, 2006

1. PERMIT STATUS**A. Reason For Permit Action:**

Permit reissuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term.

B. NPDES permit - N/A
NPDES permit effective date: N/A
NPDES permit expiration date: N/A

C. LPDES permit - (LA0072389)
LPDES permit effective date: April 1, 2001
LPDES permit expiration date: March 31, 2006

LPDES permit - (LAR05M402)
LPDES permit effective date: May 1, 2006
LPDES permit expiration date: April 31, 2011**

**This permit will be replaced upon issuance of this final permit.

D. Date Application Received: March 27, 2006

2. FACILITY INFORMATION**A. FACILITY TYPE/ACTIVITY - oilfield service company**

Halliburton Energy Services, Hanger Drive is an existing oilfield service company. Downhole equipment is brought in from offshore operations where it is cleaned and rebuilt.

B. FEE RATE

1. Fee Rating Facility Type: minor
2. Complexity Type: II
3. Wastewater Type: III
4. SIC code: 1389

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C. LOCATION - 719 Hanger Drive, New Iberia, Iberia Parish
(Latitude 30° 02'18", Longitude 91° 52'36")

3. OUTFALL INFORMATION

Outfall 001

Discharge Type: equipment washwater and stormwater runoff
Treatment: electrocoagulation unit, settling pond, oil/water separator
Location: at the point of discharge from the oil/water separator located on the southeast side of the facility (Latitude 30°02'18", Longitude 91°52'36")
Flow: 2000 gpd
Discharge Route: local drainage thence to Segura Branch Canal thence to Armenco Branch Creek

4. RECEIVING WATERS

STREAM - local drainage thence to Armenco Branch Creek

BASIN AND SEGMENT - Vermilion-Teche Basin, Segment 060901

DESIGNATED USES - a. primary contact recreation
b. secondary contact recreation
c. propagation of fish and wildlife

5. PROPOSED EFFLUENT LIMITS

BASIS - See Rationale below.

6. COMPLIANCE HISTORY/COMMENTS

A. Compliance History

An inspection was performed on June 13, 2005. The findings were as follows: (1) DMR's, lab analysis sheets, SWP3, and SPC Plan were available for review; (2) the facility grounds appeared to be in order and no spills were noted; (3) there was no discharge at the time of the inspection and no problems were noted; (4) the electro-coagulation unit that is used to treat the washwater was not working properly; the facility is working to solve the problem with COD excursions and is using the retention pond for secondary treatment; (5) a DMR review revealed excursions for COD, TSS and oil and grease; (6) the SPC Plan was being revised; (7) all storage tanks have containment walls and are inside of a building.

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B. DMR Review/Excursions

<u>Date</u>	<u>Parameter</u>	<u>Outfall</u>	<u>Reported Value</u>	<u>Permit Limits</u>
4/06	COD	001	142 mg/L	125 mg/L
2/06	COD	001	134 mg/L	125 mg/L
12/05	COD	001	136 mg/L	125 mg/L
12/05	TSS	001	48 mg/L	45 mg/L
12/05	pH	001	9.25 s.u.	6-9 s.u.
11/05	TSS	001	175 mg/L	125 mg/L
11/05	TSS	001	74 mg/L	45 mg/L
10/05	TSS	001	132 mg/L	125 mg/L
9/05	TSS	001	191 mg/L	125 mg/L
8/05	TSS	001	188 mg/L	125 mg/L
8/05	pH	001	9.01 s.u.	6-9 s.u.
7/05	COD	001	198 mg/L	125 mg/L
6/05	COD	001	188 mg/L	125 mg/L
5/05	COD	001	126 mg/L	125 mg/L
5/05	TSS	001	62 mg/L	45 mg/L
5/05	pH	001	9.31 s.u.	6-9 s.u.
4/05	COD	001	937 mg/L	125 mg/L
4/05	Oil & Grease	001	25 mg/L	15 mg/L
3/05	COD	001	572 mg/L	125 mg/L
1/05	COD	001	656 mg/L	125 mg/L
12/04	COD	001	637 mg/L	125 mg/L
11/04	COD	001	877 mg/L	125 mg/L
11/05	Oil & Grease	001	37 mg/L	15 mg/L
11/05	TSS	001	78 mg/L	45 mg/L
10/05	TSS	001	643 mg/L	125 mg/L
10/05	Oil & Grease	001	18 mg/L	15 mg/L
9/05	COD	001	762 mg/L	125 mg/L
9/05	Oil & Grease	001	16 mg/L	15 mg/L
8/05	COD	001	976 mg/L	125 mg/L
7/05	COD	001	403 mg/L	125 mg/L
6/05	COD	001	755 mg/L	125 mg/L
5/05	COD	001	277 mg/L	125 mg/L
4/05	COD	001	1190 mg/L	125 mg/L
3/05	COD	001	909 mg/L	125 mg/L
2/05	COD	001	599 mg/L	125 mg/L
2/05	Oil & Grease	001	19 mg/L	15 mg/L
1/05	COD	001	474 mg/L	125 mg/L

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7. EXISTING EFFLUENT LIMITS

Outfall 001 - equipment washwater and stormwater runoff

Parameter	LPDES	
	Monthly Average	Daily Maximum
Flow - gpd	---	Report 1/month Est.
COD	---	125 mg/L 1/month Grab
Oil and Grease	---	15 mg/L 1/month Grab
TSS	---	45 mg/L 1/month Grab
Soaps and Detergents	Report	--- 1/month Inv. Calculation
pH	6.0 - 9.0 s.u. 1/month Grab	

8. ENDANGERED SPECIES

The receiving waterbody, Subsegment 060901 of the Vermilion-Teche Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 21, 2005 from Watson (FWS) to Gautreaux (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

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9. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

10. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in the application.

11. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

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Rationale for Halliburton Energy Services, Inc.

1. **Outfall 001 - equipment washwater and stormwater runoff** (estimated flow is 2000 gpd)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg:Daily Max (mg/l)	<u>Reference</u>
Flow	Report:Report	
TSS	---:45 mg/L	LPDES General Permit LAG480000 (BPJ)*
COD	---:125 mg/L	LPDES General Permit LAG480000 (BPJ)*
Oil and Grease	---:15 mg/L	LPDES General Permit LAG480000 (BPJ)*
Soaps & Detergents	Report:---	LPDES General Permit LAG480000 (BPJ)*
pH	6.0 -9.0 s.u.	LPDES General Permit LAG480000 (BPJ)*
Visible Sheen	---:No Presence	LPDES General Permit LAG480000 (BPJ)*

Treatment: electrocoagulation unit, settling pond, oil/water separator

Monitoring Frequency: 1/month for all parameters at the point of discharge from the oil/water separator located on the southeast side of the facility

Limits Justification: LPDES General Permit LAG480000, Schedule B; BPJ; previous permit; and similar discharges. The monitoring frequency for Schedule B is 1/3 months. The monitoring frequency in the existing permit for this facility is 1/month. The monitoring frequency for the renewal permit will remain at 1/month based on the numerous excursions for Outfall 001.

* Existing permits for similar outfalls
BPJ Best Professional Judgement
su Standard Units

NOTE

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.

STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

A SWP3 is included in the permit because in accordance with LAC 33:IX.2511.A.1, storm water shall not be required to obtain and LPDES permit "... except... discharges associated with industrial activity." In accordance with LAC 33:IX.2511.B.14.a-k, facilities classified as SIC code 1389 are considered to have storm water discharges associated with industrial activity.

The SWP3 shall be prepared, implemented, and maintained within (6) months of the effective date of the final permit. The plan should identify potential

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sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in the storm water discharges associated with industrial activity at the facility (see Narrative Requirements for the AI).

TMDL/303(d) WATERBODIES

Subsegment 060901 is not listed on LDEQ's Final 2004 303(d) list as impaired. However, subsegment 060901 was previously listed as impaired for suspended solids/turbidity/siltation, nutrients, organic enrichment/low DO, pathogen indicators, carbofuran, and phosphorus for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving waterbodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDL's have been established for subsegment 060901:

The Bayou Petite Anse TMDL's for Dissolved Oxygen and Nutrients was completed April 2002. According to this TMDL, all facilities with oxygen demanding parameters in their permit were included in the TMDL calculations, but none of them, including Halliburton Energy - Hanger Drive, was considered large enough to be modeled explicitly. This facility is not expected to discharge pollutants at a level which would cause or have the reasonable potential to cause or contribute to an excursion above any present state water quality standard for the nutrients or phosphorus impairment causes. However, to protect against the potential discharge of pollutants which may contribute further to the organic enrichment/low DO impairment cause, a COD limit has been established for Outfall 001.

The Bayou Petite Anse TMDL for Fecal Coliform was completed April 2003. This facility's discharges were not addressed in this TMDL. Additionally pollutants associated with the pathogen indicator impairment (fecal coliform) are not expected to be discharged from this facility.

The TMDL for TSS, Turbidity, and Siltation was completed May 2001. Point sources do not represent a significant source of TSS as defined in this TMDL and are already addressed by LDEQ through permitting of point sources. To protect against the further impairment of the suspended solids/turbidity/siltation cause a TSS limit has been established for Outfall 001.

The TMDL for Carbofuran was completed March 2002. There is only one point source discharger, FMC Corporation Agricultural Products Group, discharging carbofuran in this subsegment. Additionally, carbofuran is not expected to be discharged from this facility.